

army he returned to London to join Mackinder's staff at the London School of Economics, and in 1925 succeeded him as professor of geography and co-head of the King's College, London School of Economics Joint School of Geography. He had planned to retire on reaching the age of sixty, but the Second World War necessitated an unwelcome postponement, and it was not until 1945 that he felt justified in vacating his post.

It is difficult to assess with any confidence the relative value of Rodwell Jones's contributions to his subject. His output of published work was limited both by his devotion to the needs and interests of his very large department and by his extremely exacting standards of scholarship. He committed nothing to print until he had tested and

re-tested materials and methods, and satisfied himself of the soundness of his conclusions. His major works, "Northern England", "North America" (in collaboration with Dr. P. W. Bryan), and "The Geography of London River" are, in consequence, not merely interpretations of first-class importance, but models of method as well. Yet it is as class teacher and research adviser that he will probably be most vividly and gratefully remembered by his students. Shy in nature, and lacking the platform brilliance of a Mackinder or a Lyde, he gained the respect, admiration and enduring affection of successive generations of students, who experienced at close range the humour and the kindness behind his shyness, and were helped to acquire permanent habits of critical and constructive thinking in their subject.

NEWS and VIEWS

International Control of Atomic Energy

SIR CHARLES DARWIN opened a discussion on "Atomic Energy and the Veto" which formed part of the programme of a meeting of the Atomic Scientists' Association held at Oxford on September 20. He said he wanted to examine carefully the grounds on which a case might be built for treating atomic energy in a different way from other armaments, in the setting up of the proposed Atomic Development Administration and in its freedom from the veto. This he analysed coldly under seven headings: (1) pure military, (2) novelty, (3) mass destruction, (4) start of war, (5) treachery, (6) scale effect and (7) feasibility. Under the first three headings he found no reason for special treatment; but under the last three he found there is a definite case. The strongest argument is the unanimous report of the Atomic Energy Technical Committee of the United Nations Organisation that international control is, in fact, a workable proposition from a technical point of view. Sir Charles discussed the seven headings in some detail. In relation to (1), he said he thought that the atomic bomb is not a 'good weapon'. Although it would certainly be effective for use on naval bases, he did not believe it would be used for land warfare. In relation to (4), he said that although the bomb could deliver a tremendous blow, it could not prevent retaliation in kind, which he thought might act as a severe deterrent to its use. With regard to (5), he stressed the possible use of the bomb as a secret weapon of treachery by an unidentifiable third party in a dispute.

Prof. N. F. Mott, in thanking Sir Charles Darwin, said he thought there might be a case for 'de-bunking' the atomic bomb, but wondered whether Sir Charles had not 'de-bunked' it too much. Dr. W. J. Arrol stressed the importance from a purely military point of view of attacks on ports and convoys. The extreme danger of its use for attack on industry and for mass-destruction was implicit in the remarks of most of the speakers. Captain Blackburn, M.P., for example, said that the scientific men had done their job in showing that atomic control is technically feasible, and that the problem is now a political one. Control is being frustrated, he said, by the U.S.S.R., and he advocated an urgent meeting of Mr. Attlee and Mr. Truman with Mr. Stalin to put the danger to the latter in the plainest terms. Failing agreement, peace-loving nations must develop predominance in atomic and other power. Mr. Conybeare did not agree that

the U.S.S.R. is frustrating control, and Dr. H. W. B. Skinner said that, while agreeing with most of Captain Blackburn's remarks, he deprecated the atmosphere of crisis. Dr. A. T. Waterman, a guest from the United States, stressed the value of international co-operation in science. Dr. K. Lonsdale asked whether there would be any purpose in the Association of Atomic Scientists calling on scientific workers not to take part in the manufacture of atomic weapons; but Prof. Mott thought that it would not be possible to secure a majority opinion on this suggestion. Another speaker complained of the placidity of the discussion of a situation in which we were running into another war, and there was some argument as to the future aim of the Association, Mr. Freedman, in particular, feeling a lack of guidance in the present dangerous situation. But Prof. R. E. Peierls said that, though scientific men should not be afraid of politics, policy must be clear-cut and united. Urgency does not replace judgment, and he felt that, at present, no straightforward lead could be given. The functions of the Association must therefore remain for the moment mainly educational.

Electron Jubilee Exhibition

To mark the fiftieth anniversary of the discovery of the electron, an exhibition, illustrating the scientific and industrial developments and the numerous electronic devices resulting from that discovery, is being held at the Science Museum, London. The exhibition is arranged around one gallery of the Museum, and is divided into eight sections, each of which is devoted to one particular aspect of the subject. By photographs, diagrams (some of which are animated), working exhibits, and the display of historical and modern apparatus, the visitor is shown how the wave-like and particle-like properties of the electron were discovered, and is given an appreciation of the way in which these discoveries have opened up a new era, both in science and industry.

An attractive handbook to the Exhibition, with an intriguing cover and a photograph of Sir J. J. Thomson, the discoverer of the electron, as frontispiece, has been prepared by Mr. D. H. Follett (Institute of Physics, London. 1s. 2d. post paid). It is in two parts. The first is a guide to the exhibition and lists the exhibits in the eight sections in the order in which they are displayed. The second is a descriptive account of the background to the several